

## CONTROLLED PRESSURE FUEL NOZZLE INJECTOR

## ABSTRACT

A multi-staged gas turbine engine fuel supply fuel injector includes at least first and second staged fuel injection circuits having first and second fuel injection points. At least first and second fuel nozzle valves operable to open at different first and second crack open pressures are controllably connected to the first and second staged fuel injection circuits, respectively. A single fuel supply manifold is connected to all of the fuel nozzle valves. A single fuel signal manifold is controllably connected to all of the first and second fuel nozzle valves. The fuel injector includes a valve housing containing the fuel nozzle valves.